

Overview of Science Support Systems

Review of SSS Software Readiness for SRO, June 5, 2009



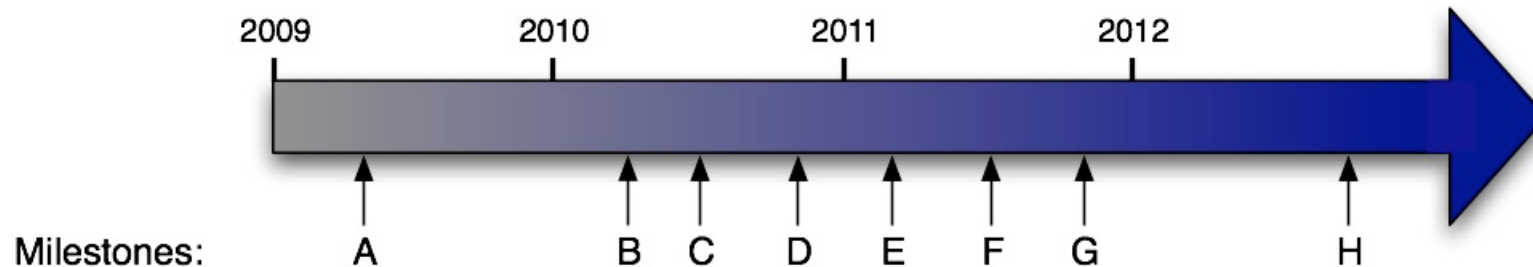
Bryan Butler

EVLA Computing Division Head

Atacama Large Millimeter/submillimeter Array
Expanded Very Large Array
Robert C. Byrd Green Bank Telescope
Very Long Baseline Array



Remaining Milestone Schedule



A - WIDAR0 testing support

B - full OSRO support (256 MHz); begin support of RSRO capability (2 GHz)

C - begin support of full-bandwidth RSRO capability (8 GHz)

D - begin support of narrow-band RSRO capability (recirculation)

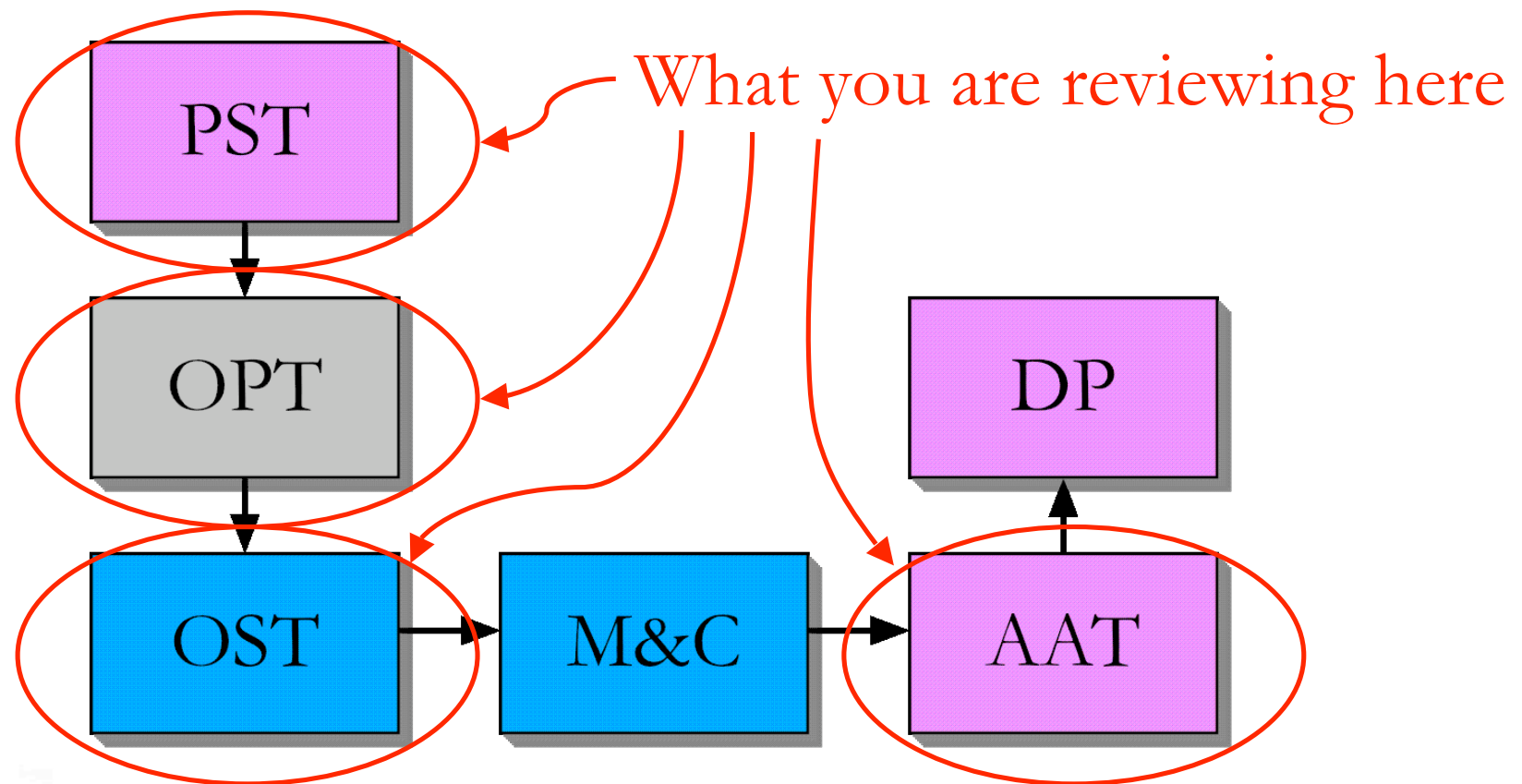
E - begin support of mixed-bandwidth RSRO capability (different widths/channels per subband)

F - full OSRO support (2 GHz); begin support of correlator resource reallocation RSRO capability (trade subbands for channels)

G - begin support of RSRO capability (special capabilities)

H - full OSRO support (8 GHz)

Crude Software Block Diagram



Requirements

We have a detailed requirements document (available on the web as a computing memo) covering all SSS subsystems:

- PST
- OPT
- OST
- AAT

Requirements have priority and timescale. These requirements are for the final EVLA software system.

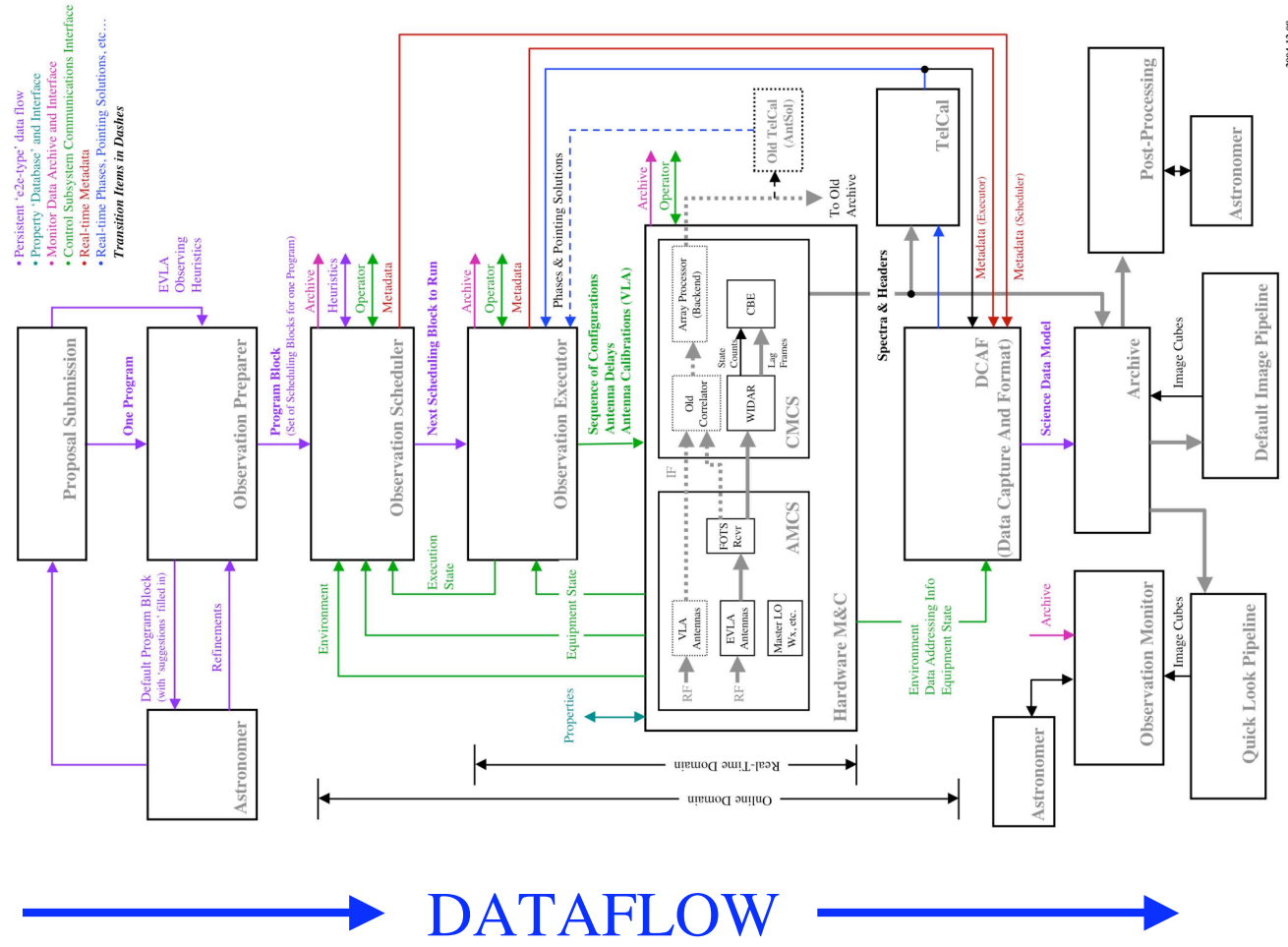
Requirements - SRO

We also have high level requirements (or “deliverables”) from operations and the construction project for SRO observing. An example:

- “PST updated for OSRO”

We believe that these, combined with the granular overall requirements and our own domain knowledge, are sufficient. However, to be sure that we are not letting something slip through the cracks, we are in the process of gathering more granular requirements for SRO observing (as modifications to the spreadsheet for the full construction project requirements).

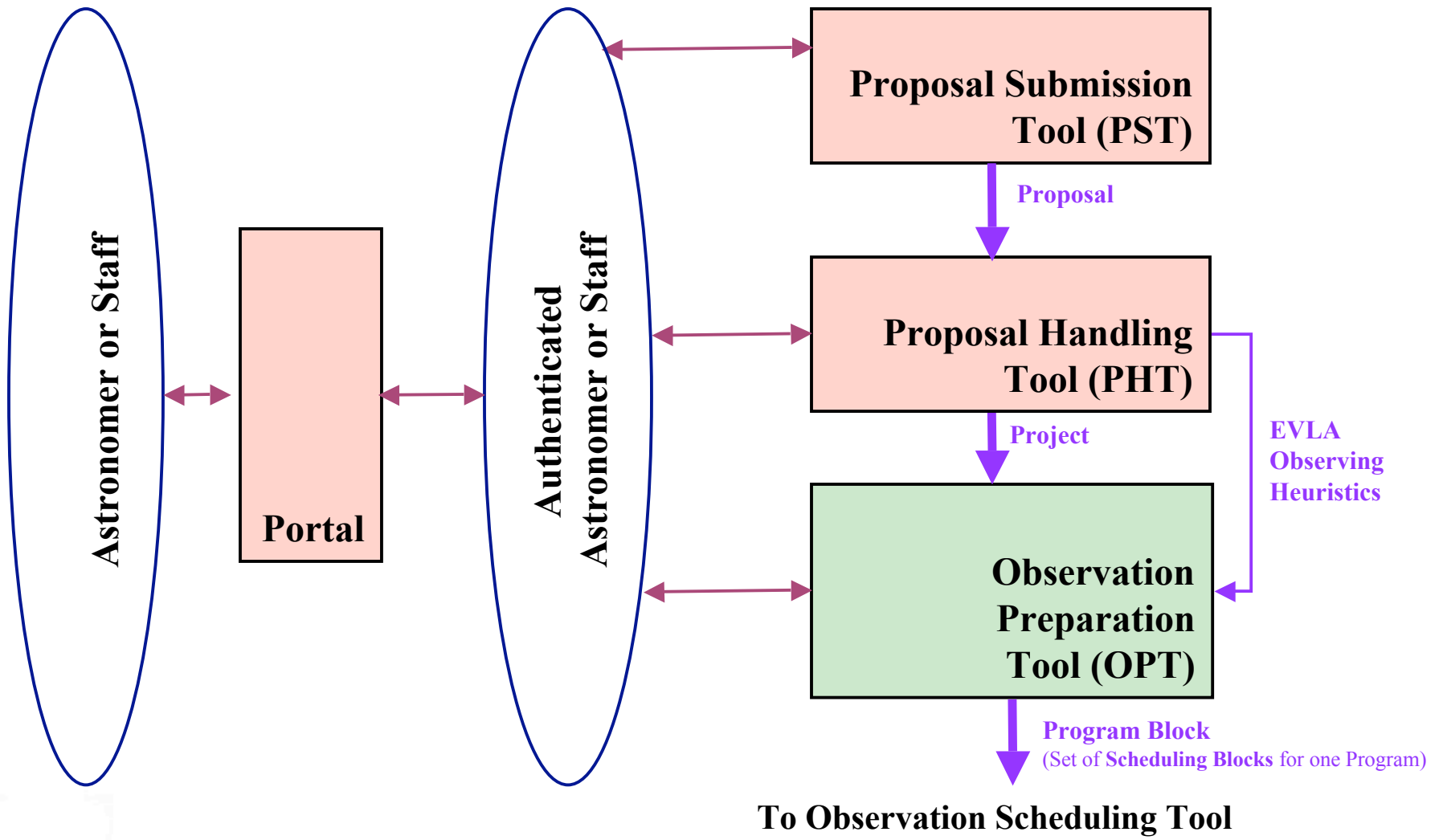
High Level Block Diagram



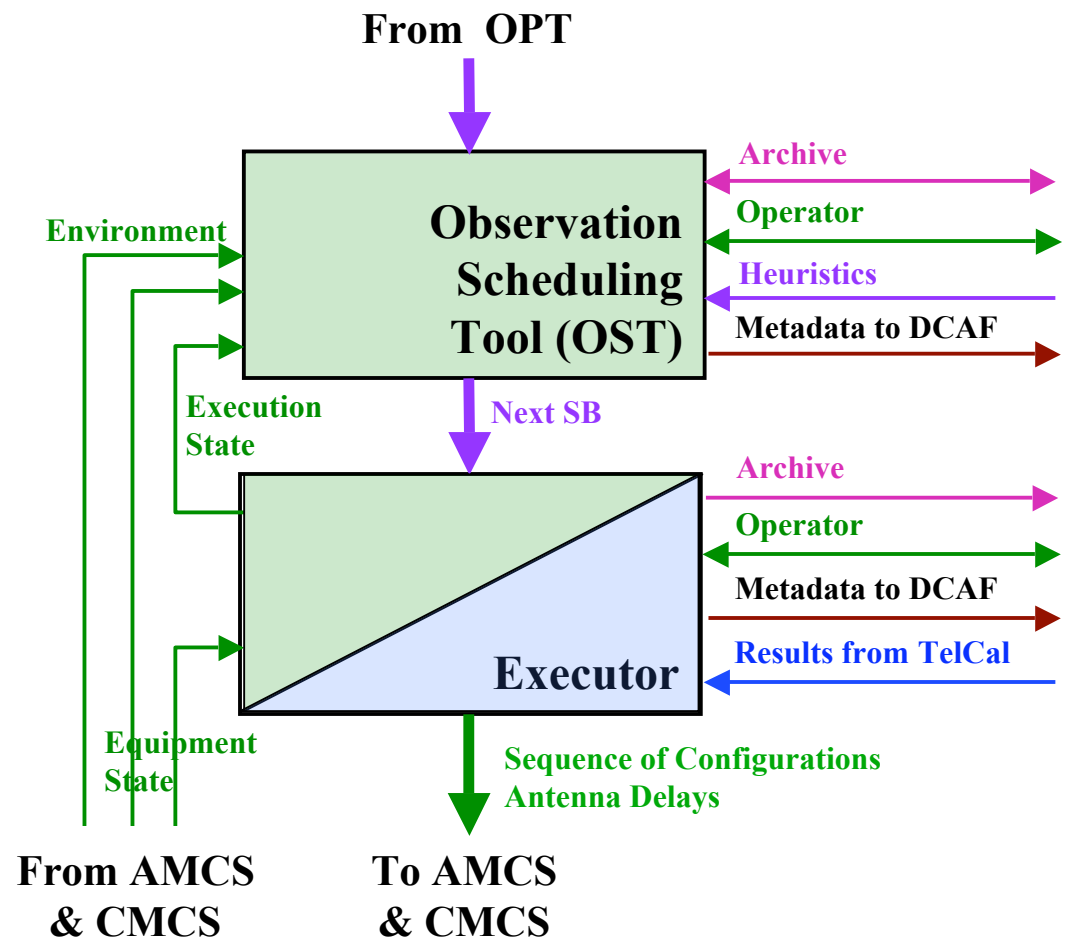
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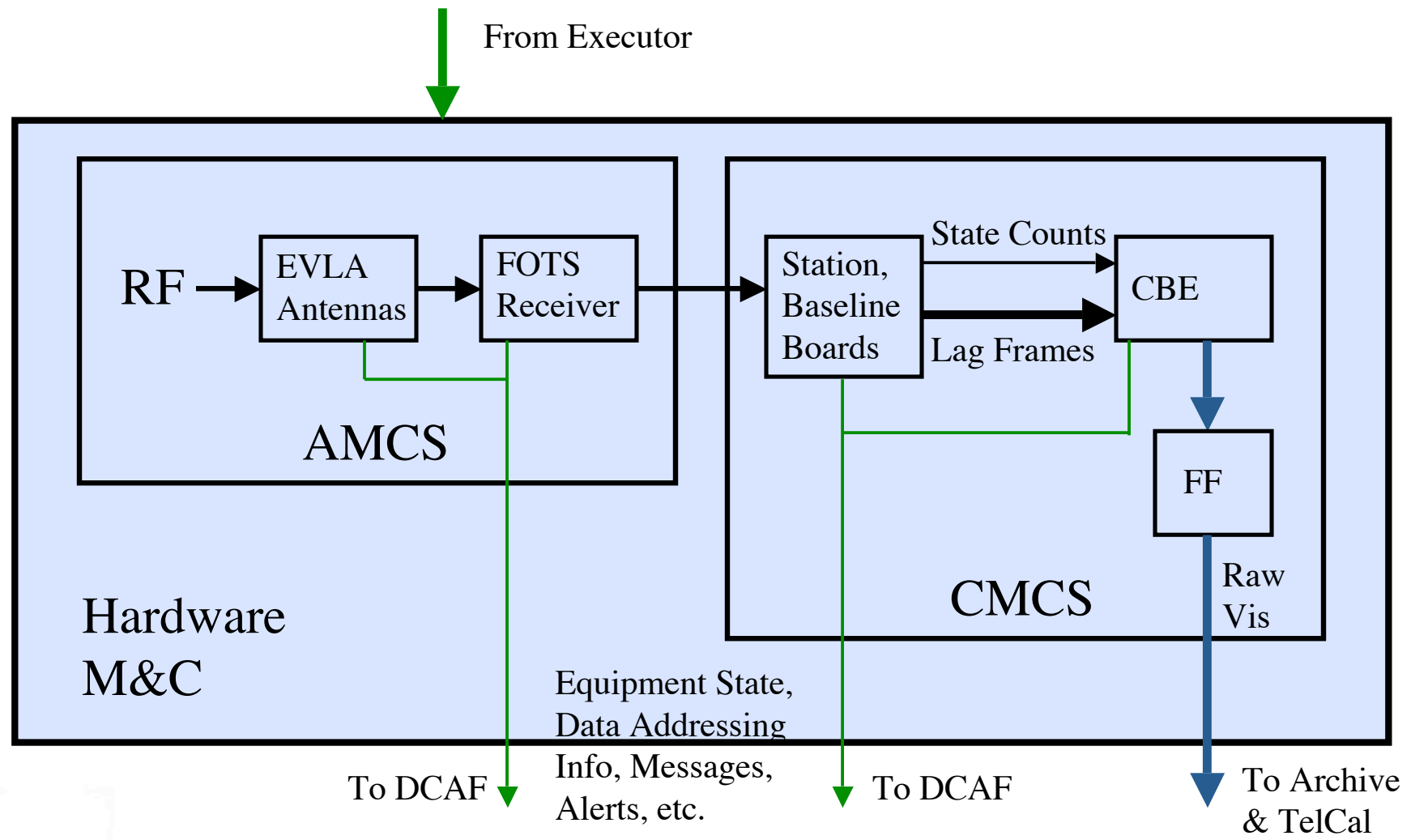
High Level Design (1)



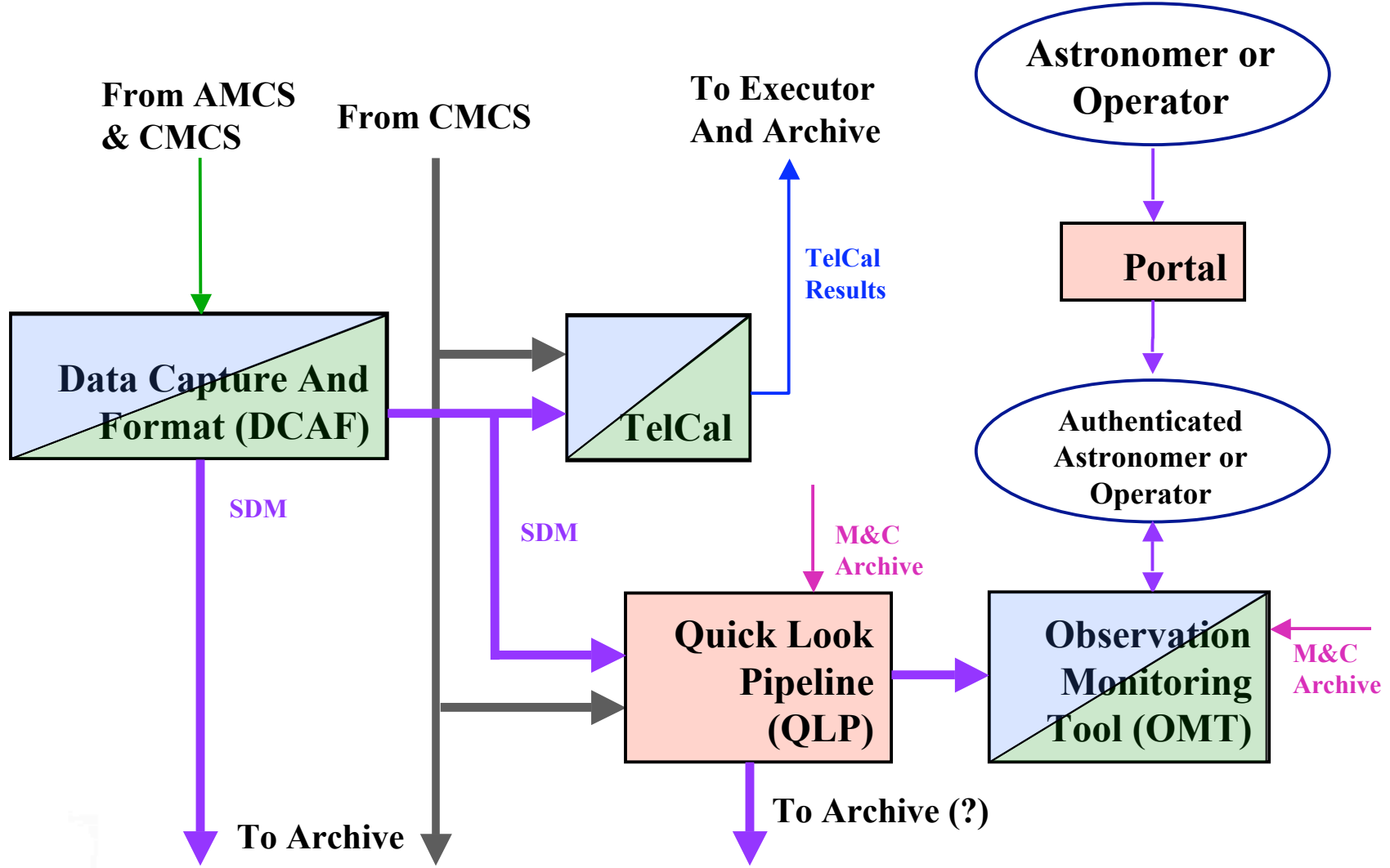
High Level Design (2)



High Level Design (3)



High Level Design (4)



High Level Design (5)

